

DUAL ACTION VALVE FOR MOLTEN METAL APPLICATIONS

Abstract of the Disclosure

A molten metal supply system (90) includes a plurality of injectors (100) each having an injector housing (102) and a reciprocating piston (104). A molten metal supply source (132) is in fluid communication with the housing (102) of each of the injectors (100). The piston (104) is movable through a first stroke allowing molten metal (134) to be received into the housing (102) from the molten metal supply source (132), and a second stroke for displacing the molten metal (134) from the housing (102). A pressurized gas supply source (144) is in fluid communication with the housing (102) of each of the injectors (100) through respective gas control valves (146). The injectors (100) each include an intake/injection port (138) in the form of a dual action valve (500) adapted to admit and dispense molten metal from the injectors (100).